GEN + TSD (existing) Withdrawal Candidate

nspection SI

Bob

Stone

6/25/81

SEPA OBICAMOB

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT ART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
Of STATE 102 SITE NUMBER
IL IL DESTITION

PART 1 - SITE INFORMATION AND ASSESSMENT				
II. SITE NAME AND LOCATION				
01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER			
Cosden Cil and Chemical Company	y 142nd Street and Paxton Avenue			
Calumet City	O4 STATE O5 ZIP CODE O6 COUNTY TL (CAC) Cock O7COUNTY 08 CONG CODE OIST C31 02-			
10 DIRECTIONS TO SITE (Starting from nearest public road) Consider at 142 Street and Parkton Avenue	(Calumet (ity (15'))			
10 DIRECTIONS TO SITE (Starting from nearest public road)	C local G l			
Conter of 142 Street and Paxton Avenue	e in calumet city			
III. RESPONSIBLE PARTIES				
01 OWNER (II known)	02 STREET (Business, mailing, residential)			
Coisden Oil and Chemical Company	142 rd Street and Paxton Avenue			
03 CITY	104 STATE US ZIP CODE 106 TELEPHONE NUMBER 1			
Course + Cido	Ju 60409 (312)862-6140			
OT OPERATOR (Il known and different from owner)	OB STREET (Business, mailing, residential)			
O9 CITY	10 STATE 11 ZIP CODE 12 TELEPHONE NUMBER			
	(312)862-6140			
12 TYPE OF OND FREE ID. C.	13127862-6140			
13 TYPE OF OWNERSHIP (Check one) A. PRIVATE D. B. FEDERAL:	☐ C. STATE ☐D.COUNTY ☐ E. MUNICIPAL			
(Agency name)				
☐ F. OTHER:(Specify)	G. UNKNOWN			
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)				
MONTH DAY YEAR	DLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: O(/ C / E) C. NONE MONTH DAY YEAR			
IV. CHARACTERIZATION OF POTENTIAL HAZARD				
01 ON SITE INSPECTION BY (Check all that apply)	TO COURT OF THE CO			
TE LOCAL HEALTH OF	EPA CONTRACTOR			
UNU "	(Specify)			
CONTRACTOR NAME(S) 02 SITE STATUS (Check one) 03 YEARS OF OPI				
Ø A. ACTIVE B. INACTIVE C. UNKNOWN	1949 DUCS TO UNKNOWN BEGINNING YEAR ENDING YEAR			
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED				
Other Organics (Flammable)	•			
S				
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION				
(Frank water (Embrument)				
Checkle in the Children				
\wedge				
2.1/				
V. PRIORITY ASSESSMENT				
01 PRICIRITY FOR INSPECTION (Check one, it highly register specked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)				
☐ A. HIGH B. B. MEDIUM/ ☐ C. LOW ☐ D. NONE (Inspection required promptly) f(inspection required) f(inspect on time available basis) (No further action needed, complete current disposition form)				
VI. INFORMATION AVAILABLE FROM				
01 CONTACT 02 OF (Agency/Organ	Inization) 03 TELEPHONE NUMBER			
Grand Hardin	Dil and Chemical/Office Manager 13,2'e 62-614			
04 PERSON RESPONSIBLE FOR ASSESSMENT 05 AGENCY	08 ORGANIZATION 07 TELEPHONE NUMBER J 08 DATE			
Jun Moore IEPA	land/Permits (217)-185-2891 MONTH DAY YEAR			

Regulating for storage containers and tanks.

EPA Region 5 Records Ctr.



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POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

II. HAZARDOUS CONDITIONS AND INCIDENTS			
01 . CA. GROUNDWATER CONTAMINATION 03 FOPULATION POTENT ALLY AFFECTED CHILLED POINT & WEST IN PROTECTIONS - CELLED TRUE TEACHING	02 (OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	人POTENTIAL	ALLEGED
- or and have home tracking	waste water let she		
- boxes = ; studges were remove	ed from punds in 1980, vep	laced with Co	oncrete-lined
01 :: B SURFACE WATER CONTAMINATION 03 FOPULATION POYENTIALLY AFFECTED	02 OBSERVED (DATE 104 NARRATIVE DESCRIPTION	, POTENTIAL	.: ALLEGED
01 [] C CONTAMINATION OF AIR 03 FOPULATION POTENTIALLY AFFECTED	02 CJ OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	. POTENTIAL	C ALLEGED
01 L: D FIRE: EXPLOSIVE CONDITIONS 03 POPULATION POTENTIALLY AFFECTED	02 © OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	[POTENTIAL	□ ALLEGED
01 C E. DIRECT CONTACTOR OF POPULATION POTENTIALLY AFFECTED	02 C OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	☐ POTENTIAL	ALLEGED
01 St. F. CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED (Acres) SEE EXPLANATION - FOR GROUND	02 □ OBSERVED (DATE) 04 NARRATIVE DESCRIPTION LICE (C) HELINGING CLEANS		C ALLEGED
01 : 2 G DRINKING WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED	02 [] OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	- POTENTIAL	: ` ALLEGED
01 T. H. WORKER EXPOSURE INJURY 03 WORKERS POTENTIALLY AFFECTED.	02 ① OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	L) POTENTIAL	?) ALLEGED
01 I POPULATION EXPOSURE/INJURY 03 PCIPULATION POTENTIALLY AFFECTED	02 [i OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	LJ POTENTIAL	Er ALLEGED

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POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 2 - WASTE INFORMATION

I. IDENTIFICATION

O1 STATE O2 SITE NUMBER

JU TUDOM 700410

ALI	\wedge		PART 2 - WAST	E INFORMATION	4	1- 1-1	D041700410
II. WASTES	TATES, QUANTITIES, AN	ND CHARACTE	RISTICS				
	ITATES Check all that apply?	02 WASTE QUAN		03 WASTE CHARACT	TERISTICS (Check dilithal	apply:	
A SOLID	E SLURRY	mus' i	tie independent	A TOXIC B CORRO			HLY VOLATILE PLOSIVE
B POWDE C SLUDGE		TONS		C RADIOA D PERSIS	ACTIVE GFLAM	MMABLE K REA	ACTIVE COMPATIBLE
D OTHER	·	į.	s chiknown		TENT		OT APPLICABLE
	:Specity;	NO OF DRUMS	·	<u> </u>			
III. WASTE	·						
CATEGORY	SUBSTANCE N	NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	E 03 COMMENTS		
SLU	SLUDGE				 		
OFM	OILY WASTE				 		
SOL	SOLVENTS						
PSD	PESTICIDES						
occ	OTHER ORGANIC CH		WILLIAM		SEE EXECUT	TIVE SUMMER	4
IOC	INORGANIC CHEMIC	CALS					
ACD	ACIDS			 			
BAS	BASES			 	 		
MES IN HAZABO	OUS SUBSTANCES C.				<u> </u>		
	OUS SUBSTANCES Set A			04 STORAGE DISI	DOCAL METHOD	T as assument	T 06 MEASURE OF
01 CATEGORY	02 SUBSTANCE N	IAME	03 CAS NUMBER	U4 STURAGE DIS	POSAL METHOD	05 CONCENTRATIO	ON CONCENTRATION
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	L						
V. FEEDSTO	OCKS See Appendix for C4'S Number	:ers)		· · · · · · · · · · · · · · · · · · ·			
CATEGORY	01 FEEDSTOC	CK NAME	02 CAS NUMBER	CATEGORY	01 FEEDST	TOCK NAME	02 CAS NUMBER
FDS				FDS			
FDS				FDS			
FDS				FDS	1		
FDS				FDS			
VI. SOURCES	S OF INFORMATION /Cite	; specific references e	g state files sample analysis	reports)			
JEPA A	iles, cenyersidae	in wetting	Scrit marage	er, plant en	ginrer		

\$,EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

TE TERRORITION 410

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS					
II. HAZARDOUS CONDITIONS AND INCIDENTS					
01 2: A GROUNDWATER CONTAMINATION 03 FOPULATION POTENTIALLY AFFECTED Little de ponds used in predicatment of - coccid nove some teaching - novelve, studges were remove	02 (1 OBSERVED (DATE) 04 NARRATIVE DESCRIPTION VASTEWATER CIT SITE LE From points in 1980, repl	APOTENTIAL aced with Co	: ALLEGED		
01 B. SURFACE WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED	02." OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	POTENTIAL	. CALLEGED		
01 LTC CONTAMINATION OF AIR 03 POPULATION POTENTIALLY AFFECTED	02 G OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	POTENTIAL	C ALLEGED		
01 C D FIRE EXPLOSIVE CONDITIONS 03 POPULATION POTENTIALLY AFFECTED	02 OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	i POTENTIAL	C ALLEGED		
01 C E. DIRECT CONTACT 03 POPULATION POTENTIALLY AFFECTED	02 OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	© POTENTIAL	C ALLEGED		
01 x F CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED (Acres) (Acres) (Acres) (Acres) (Acres) (Acres)	02 (OBSERVED (DATE) 04 NARRATIVE DESCRIPTION LITELY (CY HELMINIO LOS CLUM	X POTENTIAL	□ ALLEGED		
01 : G DRINKING WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED	02 L) OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	□ POTENTIAL	. ' ALLEGED		
01 : H WORKER EXPOSURE INJURY 03 VIORKERS POTENTIALLY AFFECTED.	02 E OBSERVED (DATE) 04 NARRATIVE DESCRIPTION	LI POTENTIAL	ALLEGED		
01 POPULATION EXPOSUFE/INJURY 03 PCPULATION POTENTIALLY AFFECTED	02 L) OBSERVED (DATE:) 04 NARRATIVE DESCRIPTION	() POTENTIAL	C. ALLEGED		

SEPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

T. DOS: 176

H. HAZARDOUS CONDITIONS AND INCIDENTS I	Continued:			
01 G J DAMAGE TO FLORA 04 NARRATIVE DESCRIPTION	02 🖸 OBSERVED (DATE) □ РОТЕ	INTIAL	□ ALLEGED
01 K DAMAGE TO FAUNA 04 NARRATIVE DESCRIPTION (Include name(s) of species)	02 G OBSERVED (DATE:)	:NTIAL	□ ALLEGED
01 [] L CONTAMINATION OF FOOD CHAIN 04 NARRATIVE DESCRIPTION	02 C OBSERVED (DATE:) 🛘 РОТЕ	NTIAL	□ ALLEGED
01 () W UNSTABLE CONTAINMENT OF WASTES (Spills runoff standing liquids leaking drums) 03 POPULATION POTENTIALLY AFFECTED	02 [] OBSERVED (DATE) □ POTE	NTIAL	□ ALLEGED
01 (N. DAMAGE TO OFFSITE PROPERTY 04 NARRATIVE DESCRIPTION	02 CT OBSERVED (DATE:)	NTIAL	□ ALLEGED
01 (2) O. CONTAMINATION OF SEWERS, STORM DRA 04 NARRATIVE DESCRIPTION	INS, WWTPs 02 🗆 OBSERVED (DATE:) 🗆 РОТЕ	NTIAL	□ ALLEGED
01 (1) F ILLEGAL/UNAUTHORIZED DUMPING 04 NARRATIVE DESCRIPTION	02 (3 OBSERVED (DATE:)	NTIAL	□ ALLEGED
05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIA	AL, OR ALLEGED HAZARDS			
II. TOTAL POPULATION POTENTIALLY AFFECT	ED:			
*EE EXECUTIVE SUMMIRY				
/. SOURCES OF INFORMATION (Cite specific references				
TEPF. Files, Conversation with T				



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415 International Specialists in the Environment

PRELIMINARY ASSESSMENT

EXECUTIVE SUMMARY

TO:

Alan Altur, U.S. EPA

FROM:

DATE:

September 30, 1991

SUBJECT:

Cosden Oil & Chem Co Site, Calumet City, Illinois

ILD091766410/F05-9104-012/FIL0266PA

The Cosden Oil & Chem Co site (Cosden) is an active chemical manufacturing facility located in Calumet City, Cook County, Illinois. The site is situated in the area known as 142nd and Paxton Avenue and is approximately 10 acres in size.

The Cosden site is owned by Cosden Oil and Chemical Company, a division of America Petrofina, Inc. The company produces polystyrene, high impact polystryrene, styrene-acrylonitrile polymers, and acrylonitrile-butadiene-styrene polymers at the site. Between 1970 and 1980 process wastewater at the site was released to a pretreatment system consisting of two unlined ponds. The ponds acted as settling basins for sludges suspended in the wastewater. After this pretreatment, wastewater was released to the Metropolitan Sanitary District of Chicago (MSD). In approximately 1969, a permit was obtained by the company from MSD to discharge process wastewater to the sanitary sewer system.

In approximately 1980 the unlined ponds were excavated and replaced with concrete basins that were constructed at the site. Approximately 400,000 pounds of sludge was removed from the ponds and disposed of off-site. The nature and extent of this clean-up operation is not known; however, file information indicates that soil borings were not

made to determine whether surrounding soils had been contaminated by leaching from the ponds. On September 16, 1980, analysis of sludge samples from the unlined ponds, collected by the company and submitted to a private lab, revealed chromium (0.83 mg/kg), zinc (12.24 mg/kg), lead (3.97 mg/kg), copper (0.1 mg/kg), and nickel (0.1 mg/kg). Suspected leaching from the unlined ponds and past spills of styrene polymer at the site prompted Cosden Oil and Chemical Company to file a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 103(c) notification in June 1981. The extent of past spills at the site is not known.

Prior to 1984 the site operated under a Resource Conservation and Recovery Act (RCRA) Interim Status Part A Application as a hazardous waste storage facility. Polymerized styrene liquid wastes and sludges are currently stored in drums kept in an on-site drum storage area for periods less than 90 days and are then shipped off-site. The drum storage area is located on a concrete pad with a sump to contain spills. The site still maintains a RCRA permit as a generator of hazardous wastes.

The Cosden site also held several Illinois Environmental Protection Agency (IEPA) air permits until 1985, when these permits were withdrawn by the company. File information indicates that the site was in compliance with the permits for several years but the nature of the permits and reason for termination are not known.

A nonsampling site inspection was performed at the site by Ecology and Environment, Inc., Field Investigation Team (FIT) on June 24, 1985. FIT confirmed the location of the concrete storage basins during this inspection and obtained information concerning site history and on-site practices. An off-site reconnaissance of the site conducted by FIT on June 11, 1991, confirmed the location of the new concrete basins but could not determine the presence of wastewaters in the basins. At this time FIT did not observe a release of hazardous substances to surface waters or to the air and did not detect any odors.

Potential impacts to surface waters in the area of the site are limited to the Little Calumet River, which is adjacent to the north border of the Cosden site. The river is used for fishing and there are approximately 6 miles of wetlands located along the river, within 15

mately 1/2 mile downstream of the site. Also, a wetland area located approximately 1/2 mile downstream of the site extends into a forest preserve known as Beaubrien Woods. Surface water runoff at the site is collected by the site's storm drainage system and released to the Little Calumet River. It is possible that surficial contamination potentially present in the soils near the former unlined settling ponds or in areas of past spills could enter this drainage system and flow into the Little Calumet River.

Groundwater in the area of the site is located 20 to 40 feet beneath the ground surface in glacial drift deposits. The nearest residential well is located approximately 1 1/2 miles southeast of the site and draws groundwater from a depth of approximately 45 feet. The majority of the population within a 4-mile radius of the site acquires drinking water from the city of Chicago's Lake Michigan surface water filtration systems. Because of the shallow depth to groundwater in the area and the past existence of unlined settling ponds at the site, it is possible that contaminants could migrate to groundwater beneath the site.

No residences, schools or day-care centers were observed within 200 feet of the site. Also, no odors or release of hazardous substances to the air have been directly observed by FIT, nor does file information indicate past air problems.

7400:10

COSDEN OIL AND CHEMICAL CO. Calumet City, Illinois ILD091766410

Cosden Oil and Chemical Company, a Division of American Petrofina, manufactures polystyrene, styrene-acrylonitrile (SAN), and acrylonitrile-butadiene-styrene (ABS) at its Calumet City facility. This facility also houses a polyethylene emulsion plant which Cosden once operated, but is now operated by the Rohn and Haas Company of Philadelphia, Pennsylvania. No wastes have been disposed of at this site; however, process wastewater generated at the plant was once discharged to a pretreatment system which included unlined ponds. Possible leaching from these ponds and the occurrence of past spills of raw materials and wastes were the main reasons why the facility filed a Notification of Hazardous Waste Site form (Spills have indeed occurred at the site, as 5,200 gallons of styrene polymer were reported spilled on June 13, 1970. The clean-up of the spill was described in the files, and seemed to be adequate to remove any possibly contaminated soil.).

Raw materials used at the plant for the production of polystyrene include a styrene monomer, butadiene rubber, and water, while ethylene, alcohol, caustic, emulsifiers, water and a catalyst are required in the production of the polyethylene emulsion. These materials are stored on-site until they are needed. Furthermore, acrylonitrile has occasionally been stored at the plant to be used in the production of ABS and SAN. Production of these two plastics began in early 1980, and only takes place when a request is made by a customer. No acrylonitrile has been used at the facility since March 1981.

Until recently, production at the plant involved the use of batch-type equipment. Hazardous wastes generated during the operation of the facility include polymerized styrene (a solid which is hazardous due to flammability) and a styrene monomer, inhibited acrylonitrile (also a solid hazardous due to flammability). The acrylonitrile waste is only generated during the production of ABS and SAN, and thus, has not been produced at the plant since 1981. Today, the polymerized styrene waste is stored in drums and eventually transported to a landfill for disposal.

During the early years of operation, process wastewater from the plant and centrifuge effluent from the dryer dust collection system were released to a pretreatment system before being discharged to the Metropolitan Sanitary District. This system included unlined ponds which were eventually replaced with concrete lined basins in 1979. Prior to installation of these basins, sludge which had accumulated in the ponds were removed and transported to off-site disposal facilities. However, no soil borings were made to determine if the surrounding soil had been contaminated due to leaching from these ponds. The new basins cover roughly two-thirds of be area of the original ponds; the remaining excavated area was backfilled to bring this area back to grade level.

As previously mentioned, a concern for past spills and leaching from unlined pends in the wastewater pretreatment system led Cosden Oil and Chemical to submit a CERCLA 103c Notification. However, in reviewing the files at IEPA and speaking with the plant engineer at Cosden, attempts have been made by the company to remove contaminated soil which resulted from spills and leaching. Furthermore, the facility does have several air permits, and has been in general compliance with these permits for several years. Because of this general compliance, and the clean-up activities which have taken place at the site in response to possible contamination, I would suggest that this facility be given low priority.